

- 12 -

## CLAIMS

1. A hot dip coating apparatus for coating a steel strip  
5 wherein the strip is immersed in a bath of coating alloy containing aluminium, the apparatus including at least one component having a surface that comes into contact with the bath when in use, wherein the component is made from stainless steel containing an appreciable amount of  
10 nitrogen distributed substantially uniformly throughout its microstructure.
2. A hot dip coating apparatus according to claim 1, wherein the stainless steel contains greater than 0.10wt% of nitrogen.
- 15 3. A hot dip coating apparatus according to either claim 1 or 2, wherein the component is a sink roll under which the metal strip is passed.
4. A hot dip coating apparatus for coating a steel strip wherein the strip is immersed in a bath of coating alloy  
20 containing aluminium, the apparatus including at least one component having a surface that comes into contact with the bath when in use, wherein the component includes at least one layer made from stainless steel containing an appreciable amount of nitrogen distributed uniformly  
25 though its microstructure.
5. A hot dip coating apparatus according to claim 4, wherein the stainless steel contains greater than 0.10wt% of nitrogen.
6. A hot dip coating apparatus according to claims 4 or  
30 5, wherein the component includes a further layer, and wherein the stainless steel layer containing the nitrogen is disposed between the surface and the further layer.
7. A hot dip coating apparatus according to claim 3, wherein the further layer is formed from stainless steel.
- 35 8. A component for a hot dip coating apparatus according to any preceding claim, the component having a surface that comes into contact with the bath when in use, and is

- 13 -

made at least in part from stainless steel containing an appreciable amount of nitrogen distributed substantially uniformly throughout its microstructure.

9. A method of forming a component of a hot dip  
5 apparatus for immersing a sheet metal strip in a bath of coating alloy containing aluminium, wherein the component is formed at least in part from a stainless steel containing an appreciable amount of nitrogen, the nitrogen being dissolved into the stainless steel whilst in a  
10 molten state so as to be substantially distributed throughout its microstructure.

10. A method of coating a steel strip wherein the strip is immersed in a bath of coating alloy containing aluminium, the method comprising the step of passing the  
15 steel strip over a component immersed in the bath, wherein the component is made from stainless steel containing an appreciable amount of nitrogen distributed substantially uniformly through its microstructure.